

RECORD COPY

00688

**K-25****OAK RIDGE  
K-25 SITE****MARTIN MARIETTA**Comprehensive Environmental Response, Compensation, and  
Liability Act (CERCLA) Assessment

for the

Oak Ridge Gaseous Diffusion Plant

This document has been prepared as UNCLASSIFIED. It may or may not have been reviewed for classification. This document and the information contained therein is for INTERNAL USE ONLY by those involved in the K-25 Site Tiger Team Assessment and may not be permanently removed from K-25 Site or made publicly available without the release approval of the K-25 Site Classification and Information Control Office.

April 1987

**APPROVAL FOR RELEASE**

K/HS-168

Date 4/87

Document # **COMPREHENSIVE ENVIRONMENTAL RESPONSE-  
COMPENSATION, AND LIABILITY ACT ASSESS-  
MENT FOR THE ORGDP** (approx 25 pp) TA Bowers

Approval for unrestricted release of this document is authorized by the Oak Ridge K-25 Site Classification and Information Control Office, Martin Marietta Energy Systems, Inc., PO Box 2003, Oak Ridge, TN 37831-7307.

*[Signature]*  
K-25 Classification & Information Control Officer

*1/6/93*  
Date

T. A. Bowers  
Environmental Management Department  
Health, Safety, and Environmental Affairs

MANAGED BY  
MARTIN MARIETTA ENERGY SYSTEMS, INC.  
FOR THE UNITED STATES  
DEPARTMENT OF ENERGY

Prepared for the U.S. Department of Energy  
Under Contract No. DE-AC05-84OR21400

#237

UNIT NUMBER 001

UNIT NAME K-1414 Gas Tanks

REGULATORY STATUS CERCLA

LOCATION - shown on map See ORGDP topographic map #1 and photograph #1

APPROXIMATE DIMENSIONS NA

CAPACITY Three underground fuel storage tanks with a total capacity of  
43,465 gallons.

FUNCTION Storage of unleaded gasoline and diesel fuel.

DATES OPERATED 1950s to the present

DESCRIPTION OF WASTE (or list attached references):

Unleaded gasoline and diesel fuel.

DESCRIPTION OF RELEASES (or list attached references):

In February 1987, the diesel tank leaked some fuel into the ground. The tank was removed and the leaked fuel was cleaned up. This is the only known release of material from this unit.

DOCUMENTATION OF NO RELEASE (or list attached references):

NA

ADDITIONAL INFORMATION NEEDED TO DETERMINE PRESENCE OR ABSENCE OF RELEASES?

No

REMEDIAL INVESTIGATION PLANNED?

A RFI plan will be prepared for this unit and submitted to the Environmental Protection Agency by the end of CY 1988.

MEDIA TO BE ADDRESSED:

COMMENTS:



1. K-1414 Underground  
Fuel Tanks

UNIT NUMBER 002

UNIT NAME K-1700 Stream

REGULATORY STATUS CERCLA

LOCATION - shown on map See ORGDP topographic map #2 and photograph #2

APPROXIMATE DIMENSIONS 3 feet wide and 0.75 miles long

CAPACITY NA

FUNCTION NA

DATES OPERATED Natural stream

DESCRIPTION OF UNIT (or list attached references):

This unit is a natural stream that receives treated wastewaters from various treatment facilities. Samples taken from the stream indicate that the sediments contain hazardous constituents that have settled into the sludge since the ORGDP has been in operation.

DESCRIPTION OF RELEASES (or list attached references):

The stream has a NPDES permit at a point near its confluence with Poplar Creek. This permit has been in place since 1974. There have been occurrences when permitted parameters exceeded the discharge limits.

DOCUMENTATION OF NO RELEASE (or list attached references):

NA

ADDITIONAL INFORMATION NEEDED TO DETERMINE PRESENCE OR ABSENCE OF RELEASES?

NA

REMEDIAL INVESTIGATION PLANNED?

A RFI plan will be prepared for this unit and submitted to DOE by the end of CY 1988.

MEDIA TO BE ADDRESSED:

Water and sludge

COMMENTS:

This stream is a transport mechanism for releasing hazardous and/or radioactive constituents into Poplar Creek since the stream collects wastewater from treatment units within the ORGDP facility.



K-1700 Stream

UNIT NUMBER 003

UNIT NAME K-25 Cooling Tower Basins and Transfer Lines

REGULATORY STATUS CERCLA

LOCATION - shown on map See ORGDP topographic map #3 - and photograph #3

APPROXIMATE DIMENSIONS See photographs

CAPACITY Approximately 27 million gallons

FUNCTION Recirculating cooling process waters to cool heat transfer systems.

DATES OPERATED 1940s to 1985

DESCRIPTION OF HAZARDOUS SUBSTANCE (or list attached references):

A chromate, zinc, phosphate treatment was used for corrosion control. The chromate, while in the systems, was of the hexavalent form.

DESCRIPTION OF RELEASES (or list attached references):

Various line breaks resulted in chromate releases. There is no available documentation of the locations.

DOCUMENTATION OF NO RELEASE (or list attached references):

ADDITIONAL INFORMATION NEEDED TO DETERMINE PRESENCE OR ABSENCE OF RELEASES?

Groundwater monitoring and soil sampling.

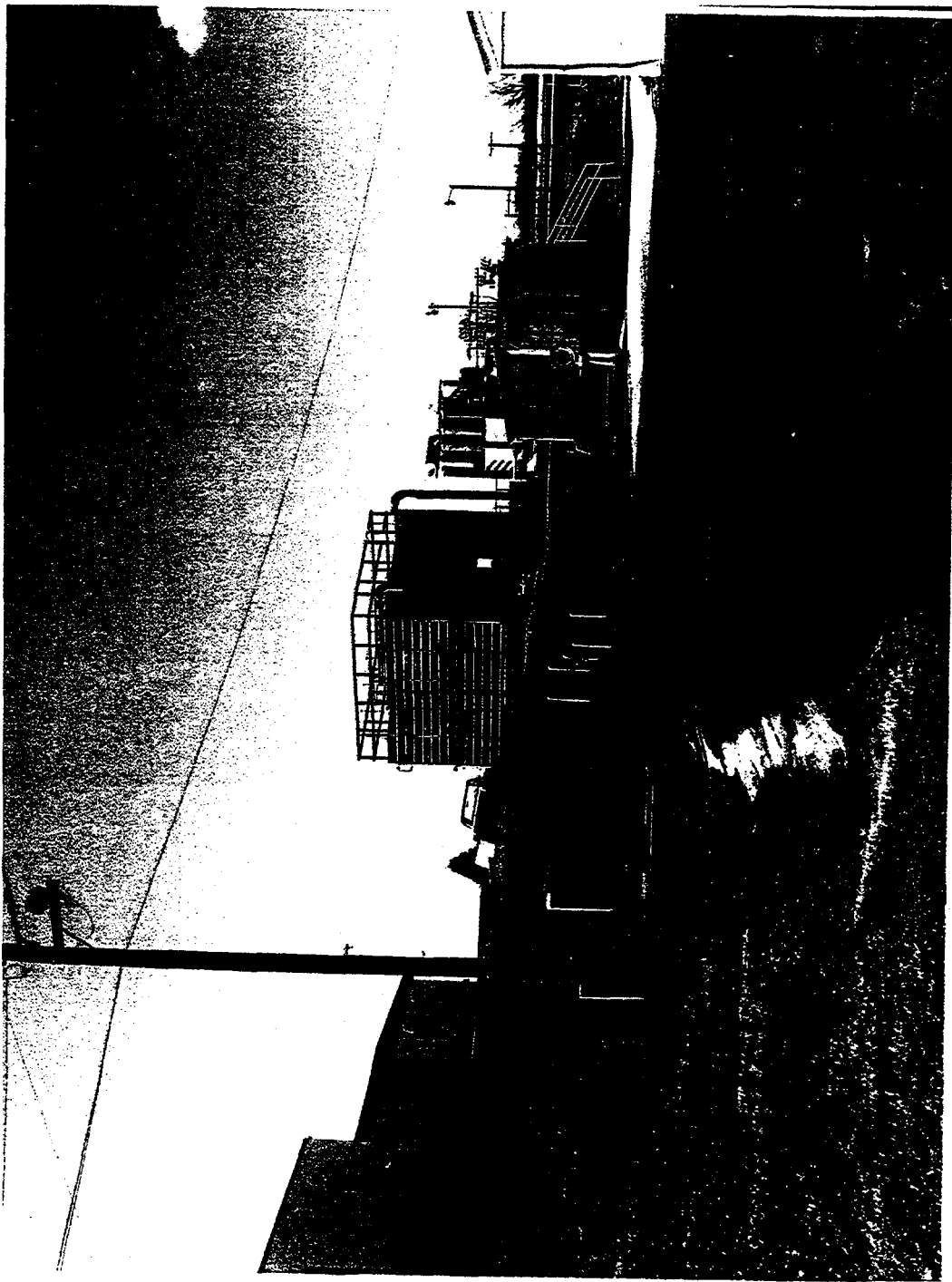
REMEDIAL INVESTIGATION PLANNED?

A RFI plan will be prepared by the end of CY 1988.

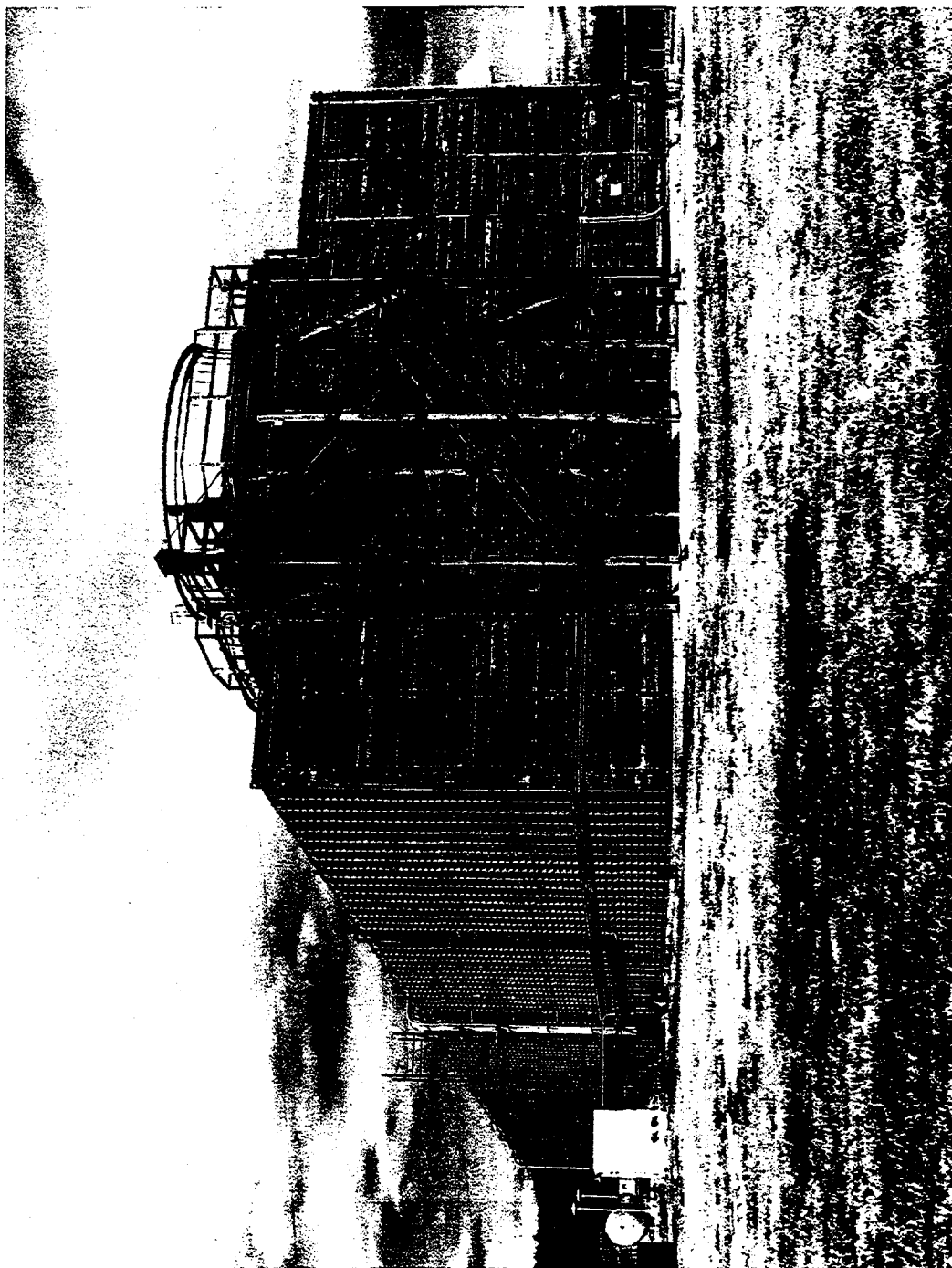
MEDIA TO BE ADDRESSED:

Soil and groundwater

COMMENTS:



3A. K-1004-N Cooling Tower



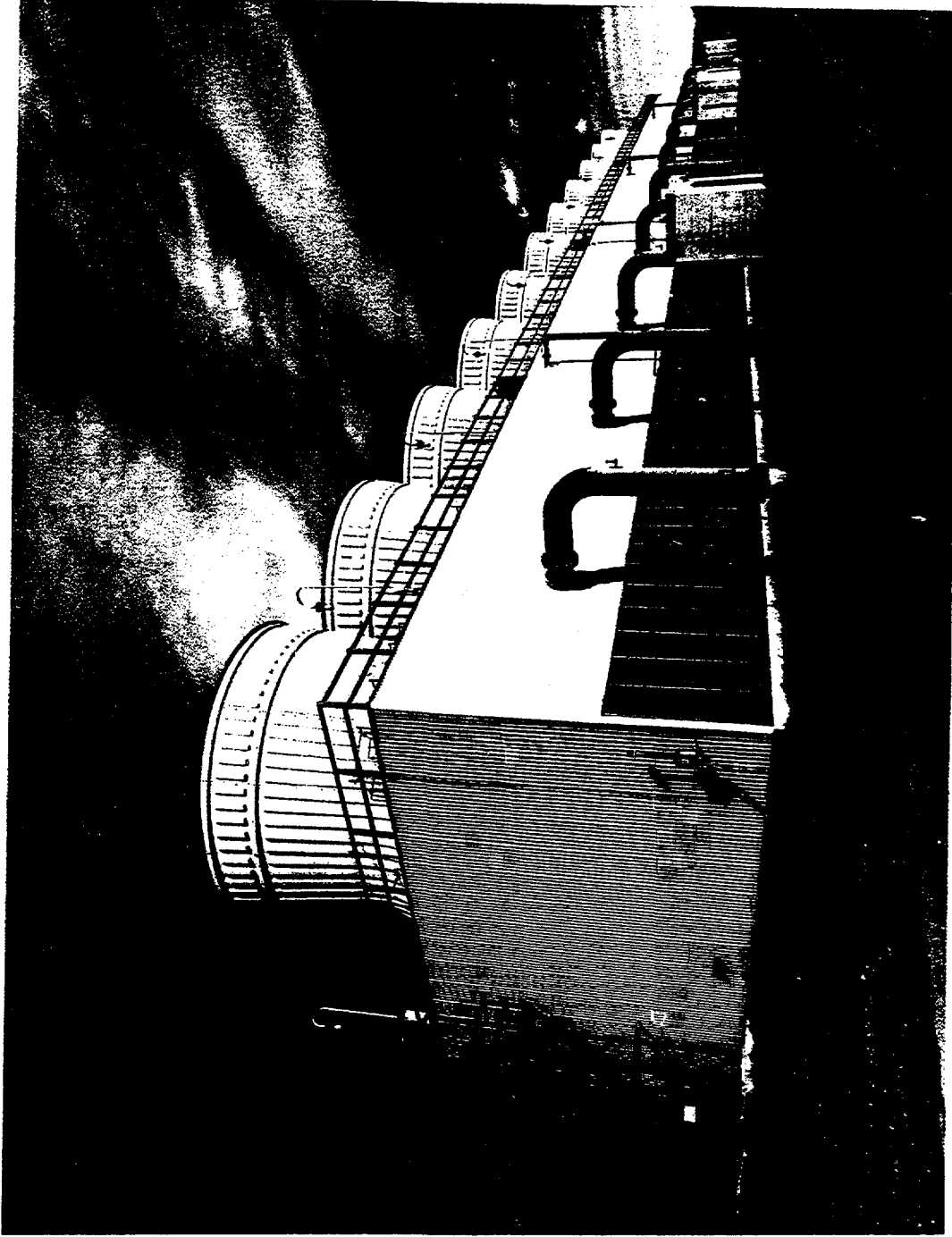
3C. K-862-E Cooling Tower



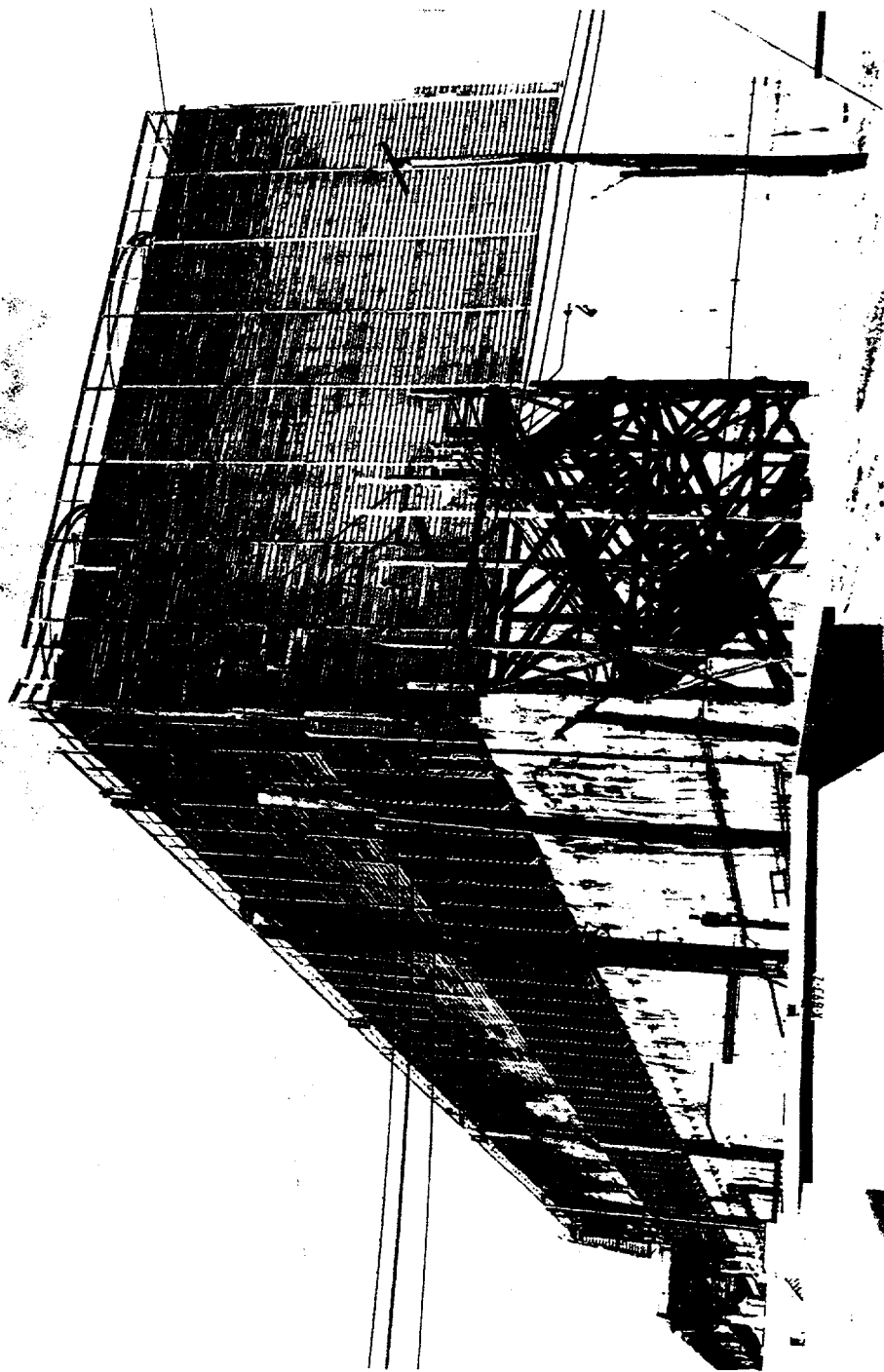
3D. K-832-H Cooling Tower



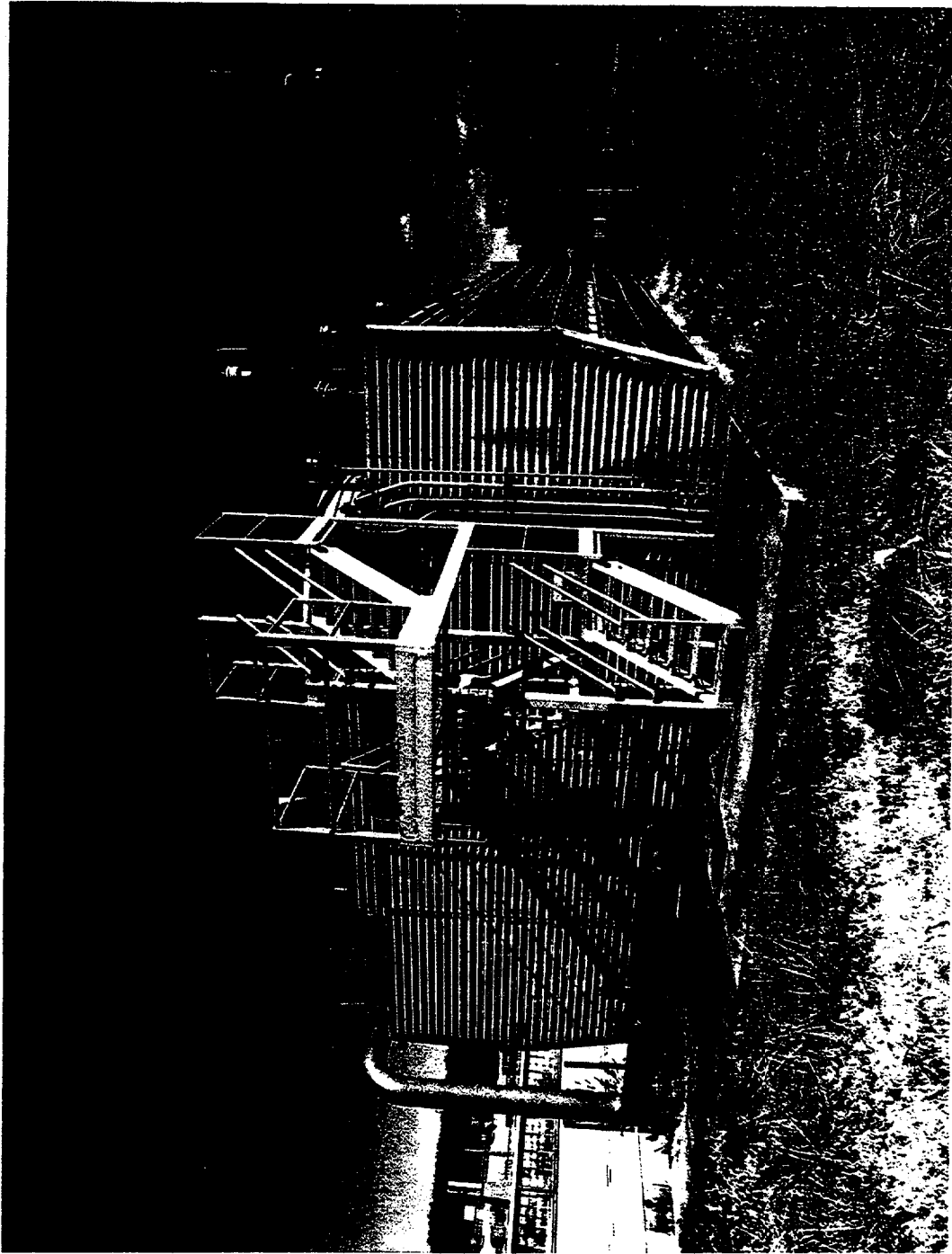
3E. K-802-A Cooling Tower  
Basin



3F. K-892-3 Cooling Tower



3G. K-892-G/H Cooling Tower



3H. K-822 Cooling Tower



31. K-802-B Cooling Tower

UNIT NUMBER 004

UNIT NAME K-725 Beryllium Building

REGULATORY STATUS CERCLA

LOCATION - shown on map See ORGDP topographic map #4 and photograph #4

APPROXIMATE DIMENSIONS 100 feet by 50 feet

CAPACITY NA

FUNCTION Development activities.

DATES OPERATED 1940s to 1952

DESCRIPTION OF HAZARDOUS SUBSTANCE (or list attached references):

The development activities performed at this unit included beryllium, uranium, and mercury.

DESCRIPTION OF RELEASES (or list attached references):

There is no evidence that a release has occurred from the unit, but it is suspected that materials could have been spilled on the floor of the building. It is also suspected that the hazardous constituents could be in the dust collection system.

DOCUMENTATION OF NO RELEASE (or list attached references):

ADDITIONAL INFORMATION NEEDED TO DETERMINE PRESENCE OR ABSENCE OF RELEASES?

Samples will be taken from the building to determine if hazardous materials are present at the unit.

REMEDIAL INVESTIGATION PLANNED?

To be determined

MEDIA TO BE ADDRESSED:

Soil, equipment, and baghouse

COMMENTS:



4. K-725 Beryllium Building





5. K-1401 Degreasers

UNIT NUMBER 006

UNIT NAME K-1410 Plating Facility

REGULATORY STATUS CERCLA

LOCATION - shown on map See ORGDP topographic map #6 and photograph #6

APPROXIMATE DIMENSIONS 100 feet by 75 feet

CAPACITY NA

FUNCTION Equipment used for plating process parts.

DATES OPERATED 1970 through 1979

DESCRIPTION OF HAZARDOUS SUBSTANCE (or list attached references):

Wastes was not managed at the unit. The unit is being evaluated since hazardous substances were used for the plating operations.

DESCRIPTION OF RELEASES (or list attached references):

None

DOCUMENTATION OF NO RELEASE (or list attached references):

The equipment is inside a building, and no material has been released from the unit. Only the equipment remains inside the building.

ADDITIONAL INFORMATION NEEDED TO DETERMINE PRESENCE OR ABSENCE OF RELEASES?

The equipment should be tested to determine if residual quantities of hazardous substances remain on or in the equipment.

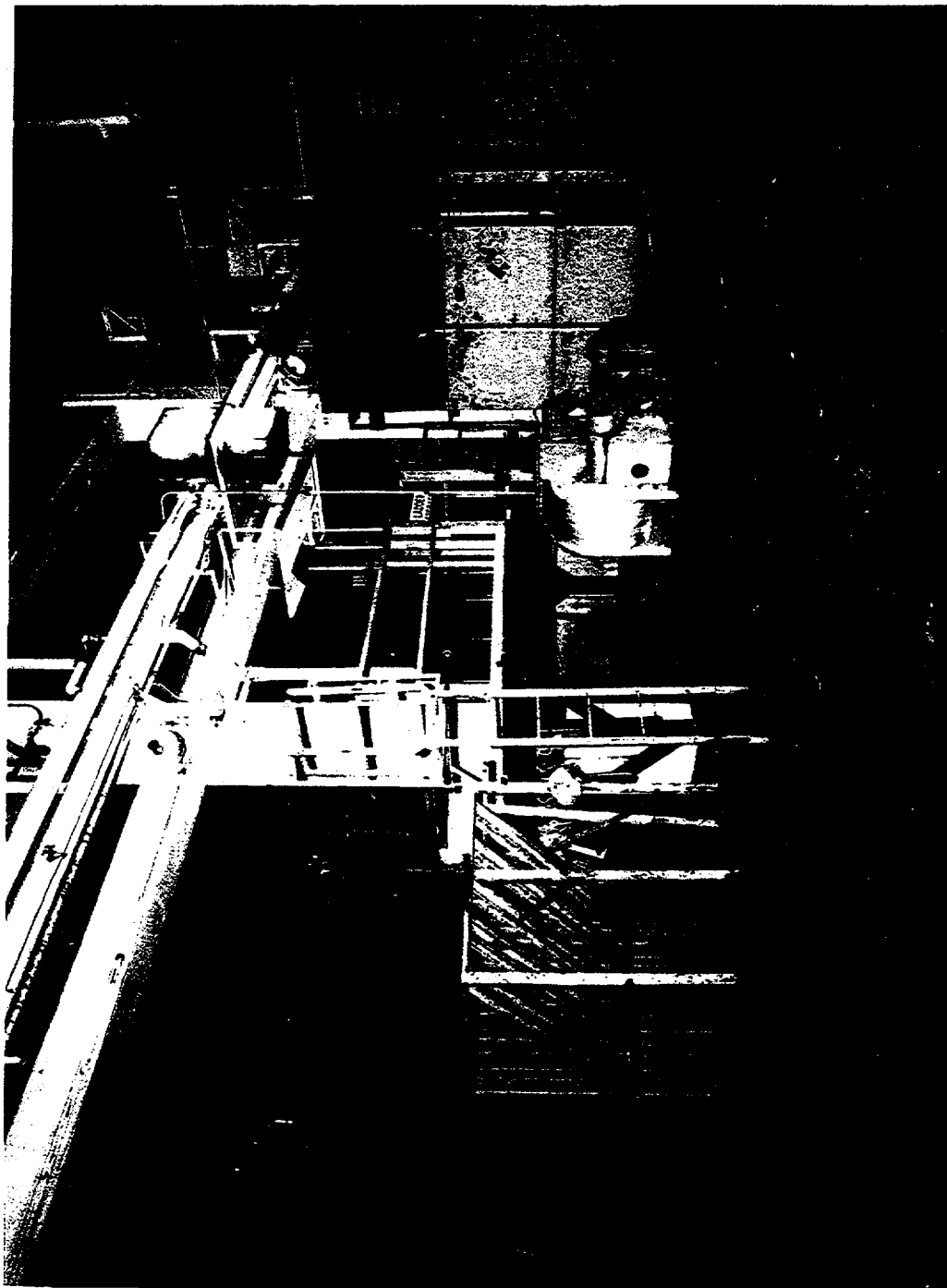
REMEDIAL INVESTIGATION PLANNED?

No

MEDIA TO BE ADDRESSED:

Equipment surfaces

COMMENTS:



6. K-1410 Building

UNIT NUMBER 007

UNIT NAME K-1007 Gas Tank

REGULATORY STATUS CERCLA

LOCATION - shown on map See ORGDP topographic map #7 and photograph #7

APPROXIMATE DIMENSIONS NA

CAPACITY 200 gallons

FUNCTION Storage of gasoline

DATES OPERATED 1950s to 1986

DESCRIPTION OF HAZARDOUS SUBSTANCE (or list attached references):

Gasoline

DESCRIPTION OF RELEASES (or list attached references):

On August 28, 1986, the tank was discovered to be leaking. The gasoline that leaked from the tank entered into a sanitary sewer lift station. The gasoline was removed from the lift station; however, a residual of gasoline remains in the soil around the tank.

DOCUMENTATION OF NO RELEASE (or list attached references):

NA

ADDITIONAL INFORMATION NEEDED TO DETERMINE PRESENCE OR ABSENCE OF RELEASES?

Soil samples will be collected around the spill area to determine if additional remedial actions will be required.

REMEDIAL INVESTIGATION PLANNED?

To be determined

MEDIA TO BE ADDRESSED:

Soil

COMMENTS:

The tank was removed following the clean-up of the spill.